The Commonwealth of Massachusetts

DIVISION of STATE COLLEGES

WORCESTER STATE COLLEGE

1972

SPRING SESSION

BEGINNING FEBRUARY 7, 1972

Program of Continuing Studies and Graduate Studies

TEL: 799–2405 or 756–5121

GENERAL INFORMATION

The courses announced in this bulletin are offered by the Division of State Colleges in cooperation with the Worcester State College. The Division of State Colleges reserves the right to cancel any course which does not have a minimum of twenty enrollments.

Both graduate and undergraduate courses are offered. Courses carrying undergraduate credit only are numbered in the 7-series; courses carrying both graduate and undergraduate credit are numbered in the 8-series; courses carrying graduate credit only are numbered in the 9-series.

REGISTRATION POLICY

Matriculating students in the Master's or bachelor's program may register on January 19th and 20th from 3:00 to 5:00 p.m.

All other students who desire to register for course offerings will register on February 1–4th from 3:00 to 5:00 p.m.

Registration will be held at the Worcester State College Graduate Office, Room S-112, Science-Laboratory Building.

Matriculation cards must be passed in at the time of registration.

No Multiple Registration, One Person — One Registrant.

TUITION AND FEES

Our bookkeeping operation cannot accommodate cash payments or partial or installment payment of tuition or fees. Check or money order for the full amount of tuition and fees is due at the time of registration.

TUITION

Massachusetts resident	$18.00 per semester hour
Non-Resident	25.00 per semester hour
Audit (Resident and Non-resident)	11.00 per semester hour

FEES

Registration Fee	10.00 (Non-refundable)
Library Fee	5.00 (Non-refundable)
Late Registration Fee	2.00
Course Change Fee	2.00
Graduate Fee (Persons receiving degrees)	5.00

UNDER NO CIRCUMSTANCES WILL ANY OF THE REGISTRATION FEES BE RETURNED.

A payment of tuition and/or fees made at the time of registration with a bad check will result in the cancellation of the student's registration until the tuition and/or fees and the penalty are properly paid. The penalty fee for tendering a bad check is $10.00.

ALL TUITION AND FEES ARE DUE THE DAY OF REGISTRATION AND ARE PAYABLE IN CHECK OR MONEY ORDER ONLY.

Tuition Refunds

Refunds for withdrawal from a course or courses will be made according to the following schedule:

First meeting but before the second meeting	100%
After second meeting but before the third meeting	80%
After third meeting but before the fourth meeting	60%
Fourth meeting through the fifteenth meeting	no refund

A student who is entitled to a refund must obtain a form for each course for which a refund is due and file it in the Office of the Program of Continuing Studies. Forms are available at the Graduate Office. Telephone and other unofficial notices will not be accepted as notification of withdrawal.

THE DATE AND TIME THAT THE NOTICE IS RECEIVED WILL BE THE OFFICIAL DATE OF WITHDRAWAL.

Withdrawal

Ceasing to attend a class does not constitute official withdrawal from a course. If notice is not given to the Office of Continuing Studies, a grade of failure (F) will be recorded.

If a student withdraws from a course *before* the *fourth* meeting, no grade will be given.

If a student withdraws from a course *before* the *eleventh* meeting, a grade of WP or WF will be given.

No official withdrawal may be made after the eleventh meeting.

VETERANS

World War II and Korean

Any resident of Massachusetts who has served in any branch of the armed forces for at least 90 days, one of which must be served either between September 16, 1940 and December 31, 1946, or between June 25, 1950 and January 31, 1955 and who has a discharge other than dishonorable may enroll without charge for instruction in any course here offered within the established limitation of 120 semester hours. To establish his eligibility the veteran must present his discharge (or photostatic copy) or a certificate of satisfactory service in the case of officers, together with proof of residence in advance of the opening date of the class meeting.

Vietnam Period

Veterans who have served at least 180 days between February 1, 1955 and the termination of the Vietnam emergency, and whose service was credited to Massachusetts are also exempt from paying tuition if they are in a Bona Fide Bachelor or Master's program. To obtain this exemption the following procedure must be observed.

1. The veteran presents photostat of his discharge papers to the State Adjutant General, Room 184, State House, Boston, Massachusetts, and obtains certification that he meets the necessary requirements and that his service is credited to Massachusetts.

2. At registration, the veteran obtains a letter stating that he is enrolled in the Program of Continuing Studies for a given number of semester hours.

3. This letter and the certificate from the State Adjutant General are submitted to the Massachusetts Department of Education, (Miss Mary Lyons, Department of Education, 182 Tremont St., Boston, Ma. 02111.)

4. The certification of Exemption from Tuition which is issued by the Department of Education is then presented to the Program of Continuing Studies.

Any veterans of the military service who do not fit into the above categories will be considered non-veteran for registration purposes. However, it is possible that some veterans who are not eligible for exemption from the Commonwealth of Massachusetts may be entitled to reimbursement or subsistence from the Veteran's Administration.

All veterans, whether or not exempt from paying tuition, must pay all fees.

Note: If this is your first enrollment, you must contact your Veteran's Administration Office for information on reimbursement. If you have enrolled in courses at Worcester State College, you, upon completed registration here, will be enrolled by the Office of Continuing Studies for the Veteran's reimbursement.

CREDIT

Regulations and requirements for degree study may be obtained at the Office of the Director of Continuing Studies, Worcester State College. It is urgently recommended that the guidance and advice of the Director and your faculty advisor in your field of concentration, wherein you must have five approved courses, be sought and faithfully followed in planning a program of study. For teachers in service, a maximum of six semester hours of credit per semester may be credited toward a degree.

The GRADUATE RECORD EXAMINATION, required of all graduate degree students, will be conducted at Worcester State College on February 26, April 22, and June 17, 1972. The bulletin of information and application blanks can be secured at the Director's Office, Room S-112, Science-Laboratory Building at Worcester State College. Registration through Educational Testing Service, Princeton, New Jersey should be completed three weeks prior to the test.

FOR DEGREE CANDIDATES, ONLY THE "APTITUDE" PART OF THIS TEST IS REQUIRED AND IT MUST BE TAKEN DURING THE FIRST YEAR OF GRADUATE STUDY.

The degree of Master of Education is awarded at the State Colleges at Boston, Bridgewater (including Hyannis Summer Session), Fitchburg, Framingham, North Adams, Salem, Westfield and Worcester. Graduate courses in partial fulfillment of the requirements for this degree may be

offered from time to time in the other State Colleges and the Massachusetts College of Art, subject to advance approval by Worcester State College.

The GRADUATE COMPREHENSIVE EXAMINATION will be conducted on March 24, 1972 at 4:00 p.m.

All degree candidates must file the "Intention to Graduate form" with the Director in Room S-112, early in the final semester of graduate study.

STUDENTS MUST RECEIVE THE HONOR GRADES OF A OR B FOR CREDIT BEYOND THE MASTER'S DEGREE.

Assistance in selection and registering in all courses is available in Room S-112, Science-Laboratory Building, the Worcester State College Graduate Office, telephone: 799–2405 or 756–5121.

Students must park in the Student Parking Areas behind the Science-Laboratory Building or the side and the rear of the Gymnasium Building.

FACULTY

JOHN F. EAGER, B.S., Ed.M., Director of Continuing Studies
PAUL F. O'NEIL, B.S., B.S., Ed. M., Associate Director of Continuing Studies
HELEN G. AGBAY, B.A., M.A.
NORA M. BARRAFORD, A.B., M.A., M.F.A.
ELIA BROWN, A.B., M.L.S., Ed.M.
JOSEFINA S. BUNUAN, B.A., Ed.M., Ed.D.
MICHAEL A. BURKE, A.B., Ed.M., M.A.T.
KATHLEEN M. BURNS, B.A., M.A.
VITO CAMPO, B.S., Ed.M., M.A.
ANTHONY CAPOZZA, B.S., Ed.M.
DORIS N. CARTER, B.S., M.A.
HAROLD L. CHAPMAN, B.S., Ed.M., M.S., Ph.D.
SR. JOSEPHINA CONCANNON, B.S., Ed.M., Ed.D.
ALAN D. COOPER, B.S., M.A., Ph.D.
ALDONA DALY, R.N., B.S., M.A.
PAUL DAVIS, B.S., Ed.M.
MARY T. DOLPHIN, A.B., Ed.M.
JOHN R. DOWLING, B.S., Ed.M.
ALFRED F. EDDY, A.B., M.A.
ROBERT P. ELLIS, A.B., M.A.
LEONARD F. FARREY, B.S., Ed.M.
ARTHUR FOGELBERG, B.S., M.A.
FLORENCE FRAUMENI, B.S., M.ED., Ed.D.
ROBERT W. GOSS, B.S., Ed.M., M.A., Ed.D.
RUTH GRIFFITHS, B.S., M.A., Ed.M.
BERNARD J. GUARINI, A.B., M.A., M.A.
ROSE GUERIN, A.B., M.A.

EDWIN R. HEDMAN, A.B., A.M., Ph.D.
MARILYN HELFENBIEN, B.A., M.A.
DAVID W. HILTON, B.S.E., Ed.M., Ph.D.
PAUL HOLLE, A.B., M.S., Ph.D.
RICHARD G. HUNT, B.S., M.S.
MARION J. JENNINGS, B.S.E., Ed.M., Ph.D.
ROBERT T. JONES, B.S., M.S., Ph.D.
GEORGE T. JOSEPH, B.S., Ed.M.
WILLIAM D. JOYCE, A.B., M.S.
ABRAM KAMINSKY, B.M.E., M.M.E.
GEORGE T. KELLEY, A.B., M.A.
MARSHALL J. KOTZEN, B.S., M.S.
RAYMOND LESLIE, B.S., Ed.M.
JOSEPH C. LONERGAN, B.S., Ed.M., C.A.G.S.
PAUL J. McCARRON, B.S., Ed.M.
JOHN F. McLAUGHLIN, Jr., B.S., Ed.M.
JOHN F. MALONEY, B.S., Ed.M.
YVONNE L. GALLANT MARTEL, A.B., M.A.
FELIX MASTERSON, A.B., M.A.
WILLIAM K. MASTERSON, A.B., M.A., M.A.
MELVIN MERKEN, B.S., M.A., Ed.D.
JOHN R. MOCKLER, B.S., M.A.
MARGARET M. NUGENT, B.S., Ed.M.
RICHARD A. O'CONNOR, B.S., M.A.
J. FRANCIS O'MARA, A.B., Ed.M., M.A., Ph.D.
VINCENT PICCOLO, A.B., M.S.
A. BARBARA PILON, A.B., M.Ed., Ph.D.
FRANK C. PIZZIFERRI, B.S., M.S.
CATHERINE I. QUINT, B.S., Ed.M., Ed.D.
DAVID H. QUIST, A.B., M.A., Ed.D.
ROBERT W. REDDING, B.S., M.S.
JOSEPH P. SCANNELL, B.S., M.Ed.
HELENA V. SEMERJIAN, B.S., Ed.M.
RICHARD H. SINE, B.A., Ed.M.
WILLIAM SPEZESKI, B.S., M.S.
RICHARD E. SULLIVAN, A.B., M.A.
G. FLINT TAYLOR, A.B., Ed.M., C.A.G.S., Ph.D.
ANTHONY THURSTON, A.B., M.A.T.
DAVID J. TWISS, B.S.E., Ed.M., M.A.
SAMUEL VAN VALKENBURG, Ph.D.

ALL COURSES CARRY THREE SEMESTER HOURS OF CREDIT

MONDAYS, 4:30–7:15 P.M., BEGINNING FEBRUARY 7, 1972

No.	Course Title	Instructor	Room
S8–873	Animal World & Its Evolution	Paul A. Holle	S–132
S8–261	Art for the Classroom Teacher	Mary Dolphin	Art Rm.
S8–46	Auditory Training & Speech Reading	Rose Guerin	S–223
S8–152	Children's Literature	Florence G. Fraumeni	S–226
S9–291	Coaching & Tchg. Selected Sports for Women	Margaret M. Nugent	G–23
S8–279	Communication Theory	Robert T. Jones	LRC3280
S9–89	Education & Race Relations	Catherine I. Quint	S–214
S8–555	Indiv. Instruc. in Math. for Elem. Students	Arthur Fogelberg	S–225A
S8–75	Industrial Arts for Special Class & Elem.	Raymond Leslie	A–110
S8–188	Literary Criticism	Richard E. Sullivan	S–219B
S8–576	Number Theory	Robert Redding	S–219A
S9–59	Reading Instruc. for Inner City Child	A. Barbara Pilon	S–212
S8–470	Sociology of Education	Frank C. Pizziferri	S–314

TUESDAYS, 4:30–7:15 P.M., BEGINNING FEBRUARY 8, 1972

S9–692	American Political Parties	David S. Twiss	S–225A
S9–777	Adv. Phil. Found of Education, Sec. A	to be announced	S–212
S8–579	Computer Programming with Fortran IV	William Spezeski	S–219A
S9–96	Found. of Open Classroom	Marilyn Helfenbein	S–211B
S9–87	Fund. of School Administration	J. Francis O'Mara	S–228
S8–250	History & Literature of Music	Abram Kaminisky	S–123
S9–69	Measurement of Intelligence (Binet)	Josefina S. Bunuan	S–227
S8–297	Movement Education	Helena Semerjian	G–23
S8–60	Prin. & Prac. in Guidance, Sec. A	Paul J. McCarron	S–224
S9–51	Research in Education, Sec. A	Alfred F. Eddy	S–217
S9–86	Role of Elem. Prin. in Today's School	George T. Joseph	S–214
S9–871	Selected Topics in Contemp. Science	Melvin Merken	S–301
S8–759	Methodology in ESL Bi-Lingualism	to be announced	S–226

WEDNESDAYS, 4:30–7:15 P.M., BEGINNING FEBRUARY 9, 1972

S9–752	Adv. Psych. Found. of Education, Sec. A	Aldona Daley	S–205
S8–47	Anatomy & Physiology of Speech Mechanism	John McLaughlin	S–228
S8–757	Cognitive Development of Children	Sr. Josephina Concannon	S–214
S9–81	Creative Lang. Arts Elementary	A. Barbara Pilon	S–212
S8–603	Functional Spanish	Helen G. Agbay	S–316
S8–875	Intro. to Phil. Found. of Education, Sec. A	William K. Masterson	S–231
S8–276	Librarian in the Modern School	William D. Joyce	LRC3280
S9–68	Measurement of Intelligence (WAIS-WISC)	G. Flint Taylor	S–227
S8–577	Modern Math. Secondary	Vito Campo	S211–A
S9–294	Recreational Leadership	John P. Mockler	S–219A
S8–83	Workshop in Elem. School Science	Michael Burke	S–126

THURSDAY, 4:30–7:15 P.M., BEGINNING FEBRUARY 10, 1972

No.	Course Title	Instructor	Room
S9–58	Diagnosis & Correction of Reading Diff.	Marion Jennings	S–228
S9–957	Endemic Ecology	Anthony Thurston	S–132
S8–184	Five New England Poets	Robert P. Ellis	S–219B
S8–435	Geography of Europe, Part II	Samuel Van Valkenburg	S–126
S9–958	Intro. to Bio-Chemistry	Alan D. Cooper	S–301
S8–750	Intro. to Psych. Fd. of Education, Sec. A	Joseph C. Lonergan	S–226
S8–273	Library Cat. & Class, Part II	Vincent Piccolo	LRC3280
S8–64	Measurement & Evaluation	David H. Quist	S–211B
S8–40	Principles of Elementary Education	Ruth Griffiths	S–227
S9–102	Practicum in School Economics	Robert W. Goss	S–314

EVENING CLASSES

TUESDAYS, 7:00–9:45 P.M., BEGINNING FEBRUARY 8, 1972

S9–753	Adv. Psych. Found. of Education, Sec. B	Bernard Guarini	S–304
S8–860	Astronomy in the Space Age	Harold L. Chapman	S–205
S8–876	Intro. to Phil. Found. of Education, Sec. B	Felix Masterson	S–231
S8–153	Learning Resources for Children	Elia L. Brown	LRC3280
S8–578	Linear Algebra	Marshall Kotzen	S–219B
S8–185	Science Fiction	Nora Barraford	S–211B
S8–280	Seminar in Educational Service Agencies	Kathleen Burns	S–225B
S8–440	Urban Geography	Richard G. Hunt	S–231

WEDNESDAYS, 7:00–9:45 P.M., BEGINNING FEBRUARY 9, 1972

S9–778	Adv. Phil. Found. of Education, Sec. B	to be announced	S–224
S8–466	Approaches to Economic Concepts	George T. Kelley	S–314
S8–837	Diplomatic History of Europe	Edwin R. Hedman	S–225A
S8–74	Driver Education & Safety	Anthony Capozza	S–211B
S8–777	Issues in Elem. Education	Richard H. Sine	S–226
S9–62	Organ. & Admin. of Guidance	Leonard F. Farrey	S–217
S8–266	Use of Multi-Media in Art	Doris N. Carter	Art Rm.

THURSDAYS, 7:00–9:45 P.M., BEGINNING FEBRUARY 10, 1972

S9–86	Educational Data Processing	John Dowling	AmpThea
S8–751	Intro. to Psych. Found. of Education, Sec. B	Richard O'Connor	S–224
S8–62	Prin. & Prac. in Guidance, Sec. B	Joseph P. Scannell	S–217
S9–52	Research in Education, Sec. B	David W. Hilton	S–214
S9–83	School Superintendency	John F. Maloney	S–219A
S8–606	Stylistics French	Yvonne L. Martel	S–311A
S9–71	Tech. & Prod. of Instructional Materials	Paul David	Art Rm.

COURSE DESCRIPTIONS

S8-873 Animal World and Its Evolution

This course will include a survey of the animal kingdom, its evolution, and certain taxonomic considerations. The course will be directed towards expanding the background of those who have had a minimum of formal training in the biological science, and will be supplemented with appropriate audio-visual materials: demonstration, slides, movies, and examination of selected living and/or preserved specimens.

PAUL A. HOLLE — Monday: 4:30–7:15 P.M.
3 Semester hours — Beginning: Feb. 7, 1972

S8-261 Art for the Classroom Teacher

In this studio workshop students will enrich their experiences in dealing with the art materials, skills and techniques valuable to the classroom teacher. A combination lecture, informal discussion and activity course will provide individual and group work in such areas as basic drawing, painting, lettering, and modeling. Exhibits, reproductions and slides will be used as enrichment material.

MARY T. DOLPHIN — Monday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 7, 1972

S8-46 Auditory Training and Speech Reading: Hearing Rehabilitation

The theory of speech reading as a receptive process with an analysis of the various systems for developing speech reading skills with children and adults. A study of the recent concepts in maximum utilization of all residual hearing in the development of effective communication functioning of hearing-impaired individuals.

ROSE D. GUERIN — Monday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 7, 1972

S8-152 Children's Literature

This course is designed to broaden teachers' acquaintance with literature suitable for elementary school children and to present effective procedures for fostering a love of good reading. Topics covered will include the classics, current fiction and non-fiction, the Newberry and Caldecott Awards, effective techniques of story-telling, interpretation of verse for children, illustrators of children's books, and sources of display materials.

FLORENCE FRAUMENI — Monday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 7, 1972

S9-291 Coaching and Teaching of Selected Sports for Women

This course is designed for those teachers and coaches interested in the following sports:

Basketball—will cover the five player game beginning with the basic skills and progressing to the more advanced strategies.
Volleyball—will introduce the game of power volleyball including the basic techniques as well as selected offensive and defensive patterns of the game.
Tennis—as time and interest allows.

MARGARET M. NUGENT — Monday: 5:30–8:15 P.M.
3 Semester hours — Beginning: February 7, 1972

S8-279 Communications Theory

This course is intended to introduce the student to the theories of communication, and the relationship of such theories to human and mechanical processes. The course is designed to aid the student in identifying channels of communications, the effect/affect of communications, and the design and use of all communications modes and channels. The course utilizes communications theory in the practical experience of designing and disseminating messages.

ROBERT T. JONES — Monday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 7, 1972

S9-89 Education and Race Relations

This course is designed to provide a background of understanding of the role of the school in the development of interracial understanding; it will include a study of: race, history of an idea in America, the culture, contemporary problems, responsibility of educators in a pluralistic society. Course requirements will be adapted to meet the needs and interests of members of the class.

CATHERINE QUINT — Monday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 7, 1972

S8-555 Individualizing Instruction in Elementary School Mathematics

This course will investigate various approaches to individualizing instruction in elementary mathematics. The primary focus will be on laboratory approaches and programmed approaches. The major project will involve constructing a programmed sequence at your particular level.

ARTHUR FOGELBERG — Monday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 7, 1972

S8-74 Industrial Arts for Elementary and Special Class Teachers

This course offers the special class teacher an opportunity to experiment with the various materials necessary for an adequate industrial arts program. The course also offers the elementary school teacher of the regular classroom opportunity to learn new materials and projects for use in unit work and the activity program. A study will be made of planning, equipping and operating such a program on a limited school budget.

S8-188 Literary Criticism

The course will examine a) speculation regarding the nature, function and value of literature, and b) methods of literary analysis. The relationship of language to literature will serve as a focal topic. Readings will range from Plato to Kreiger.

RICHARD SULLIVAN — Monday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 7, 1972

S8-576 Number Theory

A thorough and concise exploration of some of the fundamental properties of the natural number system. Topics will include: Divisors and prime numbers, fundamental properties of congruences, polynomial congruences and quadratic residues.

ROBERT REDDING — Monday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 7, 1972

S9-59 Reading for Inner-City Children

The multi-faceted problems which many inner-city children face in trying to master the skills of reading will be explored. Techniques for remedying the difficulties will be presented. Teachers will be given the chance to consider in depth how they will offset the barriers to language and reading achievement which many of these children face.

A. BARBARA PILON — Monday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 7, 1972

S8-470 Sociology of Education

A course designed to study education, emphasizing the social process as well as the institutional structure. Particular attention will be given to the social roles of teachers, administrators, pupils, the group basis of education and community influence.

FRANK C. PIZZIFERRI — Monday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 7, 1972

S9-777 Advance Philosophical Foundations of Education, Sec. A

This course has the two-fold purpose of (1) studying and evaluating the contributions made by outstanding philosopher-educators both of the past but especially of the modern eras and (2) analyzing the basic philosophical issues and problems in education and society and the alternatives posed by the different philosophical systems and assumptions. The student is expected to read and analyze the original contributions of the major philosophers in order to determine to what extent a synthesis of viewpoint may be achieved.

Prerequisite: Undergraduate credits in both Philosophy and in Philosophy of Education or equivalency.

TO BE ANNOUNCED — Tuesday: 4:30–7:15 P.M.
3 Semester Hours — Beginning: February 8, 1972

S9-692 American Political Parties and Pressure Groups

This course will consider the functions, methods and organization of American political parties and pressure groups. The role of parties and pressure groups in the American political process will be explored.

DAVID TWISS — Tuesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 8, 1972

S8-579 Computer Programming with Fortran IV

This course deals with using computers for mathematics and science problem solving. Topics include: a brief introduction to computers, real and integer arithmetic, input and output statements, control statements, DO loops, basic format, subscripted variables, subordinate programs and subordinate routines, double precision and character manipulation. Programming techniques will be emphasized.

WILLIAM SPEZESKI — Tuesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 8, 1972

S9-76 Foundations of the Open Classroom

This course will attempt to make the students aware of the theories which underlie this new concept of classroom direction. Lectures will be supplemented with guest speakers from schools using this procedure, visits to resource facilities, where feasible; as well as visual materials.

MARILYN HELFENBEIN — Tuesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 8, 1972

S9-87 Fundamentals of School Administration

This course constitutes a basic introduction to the principles of school administration. Topics to be included are: school population and student personnel; the organization and substance of the educational program; personnel of the school system; the physical plant and its facilities; governmental structure for education and inter-governmental relations; internal school organization; financing of education; school business administration, and the administrative process.

J. FRANCIS O'MARA — Tuesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 8, 1972

S8-250 History and Literature of Music

This course is designed to encourage greater enjoyment of music through understanding and discrimination. It is directed toward those who have had some or no formal training, but who wish to broaden their background in this area. Although not a methods course, these materials should be useful professionally to both prospective and in-service teachers.

ABRAM KAMINSKY — Tuesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 8, 1972

S9-69 Measurement of Intelligence (Binet)

This course will be concerned with a study of the origins and uses of intelligence tests. Specific emphasis will be given to the 1960 revision of the Stanford-Binet test. Attention will be centered on administering, scoring, and interpreting the Stanford-Binet test. This course may be used to meet the requirements for a Binet Certificate. Students must utilize the "Binet" Kit.

JOSEFINA S. BUNUAN — Tuesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 8, 1972

S8-759 Methodology in ESL-Bi-Lingualism

This course will treat topics in second language acquisition and applied teaching methodology in teaching English to speakers of other languages. Contrastive studies and special issues in bi-lingualism will be covered. Selected topics in the areas of language acquisition, psycholinguistics, linguistic sociology and surveys of current materials and current programs in Massachusetts will be presented by several speakers representing these areas. Students will be expected to develop projects based on their particular experiences and interests.

JOHN V. CORCORAN — Tuesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 8, 1972

S8-297 Movement Education for the Classroom Teacher

Curriculum development in an action-oriented, child-centered physical education program which utilizes the process of discovery and the technique of problem solving.
Individual research projects on creativity, open school curriculum and problem solving. Personal Participation.

HELENA SEMERJIAN — Tuesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 8, 1972

S8-60 Principles and Practices in Guidance (Guidance I)

This is an introductory course designed to provide the student with an understanding of the need, meaning, and the scope of guidance services. The principles and practices involved in the following guidance areas will be considered: introduction and philosphy of guidance; understanding the individual and his needs; essential orientation activities for the student; collecting, recording and evaluating data; interviewing and counseling; guidance through group activities; placement and follow-up activities; organization and evaluation of guidance. The emphasis of the course will be placed upon the role of the classroom teacher in the guidance program. Note: This course or its equivalent is a prerequisite of advanced courses in guidance.

PAUL J. MCCARRON — Tuesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 8, 1972

S9-51 **Research in Education, Sec. A**

This course will stress the use of appropriate research methods in the selection and evaluation of data. It is designed to aid teachers in the preparation and understanding of educational research reports. Points of emphasis will include the nature of research, library techniques and resources, selection and delimitation of problems, documentation, organization and format of a report, appraisal of educational literature, necessary statistical concepts and methods of research. The student will be expected to demonstrate his knowledge of these in a term paper.

ALFRED F. EDDY — Tuesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 8, 1972

S9-86 **Role of the Elementary School Principal in Today's Schools**

This course is designed for those students who are concentrating in Elementary School Administration. The following areas will be explored: the role of the elementary school principal in school-community relations; line and staff relationships; problems of communications; program evaluation; and teacher recruitment. The format of this course will be designed to encourage individual involvement through the use of the seminar techniques.

GEORGE T. JOSEPH — Tuesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 8, 1972

S9-871 **Selected Topics in Contemporary Science**

This course will examine the foundations of selected scientific advances in the twentieth century which have resulted in the scientific and technological revolution in our time. Participants should emerge with an enhanced appreciation and understanding of some of the contemporary frontiers in scientific research. The course is intended for the non-scientist as well as those with a more specialized interest in the field.

MELVIN MERKIN — Tuesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 8, 1972

S9-752 **Advanced Psychological Foundations of Education, Sec. A**

In this course, class-members will study and evaluate the role of those environmental, mental, and extra-mental forces which motivate all learners to utilize fully and effectively their capacities, aptitudes, and attitudes. It includes a systematic analysis of the major schools of psychology with special attention focussed on the contemporary schools. Attention is given to the teachers' role in the learning process and special emphasis will be centered on the application of these principles to specific classroom situations.

Prerequisite: 9 semester hours undergraduate credit in General Psychology and Educational Psychology or their equivalency.

ALDONA DALEY — Wednesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 9, 1972

S8-47 Anatomy and Physiology of the Speech and Hearing Mechanism

An introduction to the study of the Speech and Hearing Mechanism; and its working in the reception and production of speech.

JOHN F. MCLAUGHLIN — Wednesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 9, 1972

S8-757 Cognitive Development of Children

The course (for those majoring in Early Childhood) focuses on an in-depth study of selected topics in the cognitive development of children stressing such topics as intelligence, problem solving, discovery, learning, etc. Work of contemporary leaders such as Bruner, Piagit, Wallach and Chomsky will be used. Course is limited to 20 students who have had background courses in Early Childhood.

SR. JOSEPHINA CONCANNON — Wednesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 9, 1972

S9-81 Creative Language Arts Elementary

This course focuses on methods and techniques of fostering and developing the creative language powers of children through primary use of trade books. The inter-relatedness of the language arts skills is emphasized strongly. Teachers will be given opportunities to present their own ideas for stimulating the growth of language arts skills creatively.

A. BARBARA PILON — Wednesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 9, 1972

S8-603 Functional Spanish

The purpose of this course is to provide teachers and others involved with the Spanish-speaking a basic working knowledge of the language and an understanding of Hispanic culture, both of which will be helpful in dealing more effectively with Spanish-speaking people. As guest speakers for this course, we shall present representative people involved in Hispanic affairs.

HELEN AGBAY — Wednesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 9, 1972

S8-875 Introduction Philosophical Foundations of Education, Sec. A

This course is an historical approach to the study of educational thought and includes an examination of primary educational concepts which have evolved through Western thought to the present day. Selections from the great documents in educational thought are studied in relation to the historical period in which they are produced. The student is expected to read and analyze the original contributions of the major educational philosophers.

WILLIAM K. MASTERSON — Wednesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 9, 1972

S8-276 Librarian in the Modern School

This course prepares the school librarian to assist the classroom teacher in assembling and introducing materials of all types now found in the modern school library for use by the pupils and teachers, both in and outside of the classroom. The principles involved in relating these resources to curriculum requirements will be applied through practice in preparing and presenting a resource unit. The course will meet the categorical requirement of "Books and Related Materials for Children and/or Young People."

Prerequisite: Two years of full-time professional experience in the classroom or library. For teachers, an additional requirement of completion of the School Library Administration and Reference courses.

WILLIAM D. JOYCE — Wednesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 9, 1972

S9-68 Measurement of Intelligence (Wais & Wisc)

Study will be made of two major Wechsler tests, namely Wechsler Adult Intelligence Scale (WAIS) and the Wechsler Intelligence Scale for Children (WISC). Students will have opportunity for practical work in administration and interpretation of both these scales. The course is designed for classroom teachers, special education teachers, school psychologists, and guidance personnel. A certificate will be issued to those who complete the testing requirements under supervision.

G. FLINT TAYLOR — Wednesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 9, 1972

S8-577 Modern Math for Secondary Teachers

This course is intended to provide the teacher of secondary school mathematics with mathematical concepts which will help him to convey the nature and spirit of mathematics from the current point of view. The course will include such topics and functions and graphs (includes trigonometric, logarithmic, exponential, inverse trigonometric, and hyperbolic functions), limits, continuity, etc.

VITO CAMPO — Wednesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 9, 1972

S9-294 Recreational Leadership

After a brief study of the history and basic principles of recreation students will acquire a knowledge of the methods employed in conducting surveys and organizing both indoor and outdoor activities under the categories, generally employed, such as Adult, Industrial, and Social Recreation. Playground activities, Arts and Crafts, Camping and the Water Sports will be evaluated.

JOHN P. MOCKLER — Wednesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 9, 1972

S8-83 Workshop in Elementary School Science

This course is designed to aid classroom teachers at the elementary school level. The objectives of the science program at the elementary level will be discussed and illustrated by suitable demonstration, audio-visual aids and science tests. The course will be of value to the teacher who wishes to improve his program in science.

MICHAEL BURKE — Wednesday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 9, 1972

S9-58 Diagnosis and Correction of Reading Difficulties

This course is designed for experienced teachers who have taught reading in the regular classroom or in a special reading program. The prerequisite is any general reading course taken at Worcester State College or elsewhere. The major emphasis will be given to identifying and removing specific reading deficits, particularly in the regular classroom. Causes of retardation will be considered. The effects of special learning disabilities on reading achievement will be investigated. One course requirement is the case study of a pupil who is a disabled reader. Students in the Reading Specialist Sequence are required to take this course. (Prerequisite Required)

MARION JENNINGS — Thursday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 10, 1972

S9-957 Endemic Ecology

This course will consider the inter-relationships of New England flora and fauna. It will be directed towards those who wish to continue and/or concentrate in the biological sciences. Several New England field, forest, and aquatic environments, will be studied in terms of present conditions, past history, and potentialities by means of lectures and laboratory exercises (including field trips, micro- and macroscopic examinations, class and individual projects and demonstrations).

ANTHONY THURSTON — Thursday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 10, 1972

S8-184 Five New England Poets

In this course the lyric poetry of Emerson, Dickinson, Frost, Cummings, and Robert Lowell will be studied intensively with the two purposes of coming to know each as an individual poet and of determining the extent to which these poets furnish evidence for what Perry Miller has called, "the New England mind."

ROBERT P. ELLIS — Thursday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 10, 1972

S8-435 The Geography of Europe, Part II

A continuation of the initial course offered in this area. A complete analysis of the continent of Europe. Its terrain and climate, its people and economies as well as the historical background of

the region. Special emphasis will be placed on European Cooperation.

SAMUEL VAN VALKENBURG — Thursday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 10, 1972

S9-958 Introduction to Bio-Chemistry

This course is designed to give a basic understanding of bio-chemical processes, including the bio-chemistry of disease. Topics include: amino acids, proteins, fats, carbohydrates, DNA, RNA, enzymes, metabolism, nutrition, digestion, aging, and metabolic diseases such as cancer and arthritis, and mental diseases. Selected laboratory exercises and demonstration will be included. A prior knowledge of chemistry is not required, but an interest in science is essential.

ALAN COOPER — Thursday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 10, 1972

S8-750 Introduction to Psychological Foundations of Education, Sec. A

This course covers the theoretical aspects of psychology for the classroom teacher. It includes a systematic analysis of the major schools of psychology and a study of the effects of heredity and enviroment. Reading in the following areas will be required: results of research on growth and development, theories of intelligence, concepts in measurement and evaluation, individual differences in capacity and achievement, and learning theory.

JOSEPH C. LONERGAN — Thursday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 10, 1972

S8-273 Library Cataloging and Classification — Part II

Principles and practices in cataloging books are supplied to non-book materials. In addition to applying the *Dewey Decimal Classification,* the *Sears' List of Subject Headings,* and *Anglo-American Cataloging Rules,* the class will also take up the *Library of Congress Classification* and *List of Subject Headings* as well as other cataloging codes designed for cataloging non-book materials.

VINCENT PICCOLO — Thursday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 10, 1972

S8-64 Measurement and Evaluation

This course considers the nature of measurement, it purpose and value in the learning situation, and the types of measuring techniques to be employed. Attention is given to the development of certain statistical concepts, facility in the selection and use of measuring instruments, and in the interpretation of data secured.

DAVID QUIST — Thursday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 10, 1972

S8-40 Principles of Elementary Education

This course is designed for the student who wishes to enter the field of teaching and to meet a certification requirement. An over-

view of American education in historical philosophical perspective will be presented. The organization and structure of the American school system, fiscal responsibilities, education as a profession and the role of the teacher will be discussed. Planning for teaching, curriculum patterns, teaching techniques and evaluative procedures will be studied. Current trends and innovative practices will be explored. The student is expected to gain depth and breadth of understanding of education today through reading, reports, and research.

RUTH GRIFFITHS — Thursday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 10, 1972

S9-102 **Practicum in School Economics**

This course will investigate current school procedures in the purchase, inventory, and distribution of materials, suppliers, and equipment necessary to the successful operation of a modern school system. As a practicum it will relate these procedures to the recommendations of the business community while searching for reasonable answers to the pressing questions posed by rising school costs.

ROBERT W. GOSS — Thursday: 4:30–7:15 P.M.
3 Semester hours — Beginning: February 10, 1972

EVENING CLASSES

S9-753 **Advance Psychological Foundations of Education, Sec. B**

In this course, class-members will study and evaluate the role of those environmental, mental and extra-mental forces which motivate all learners to utilize fully and effectively their capacities, aptitudes and attitudes. It includes a systematic analysis of the major schools of psychology with special attention focused on the contemporary schools. Attention is given to the teacher's role in the learning process and special emphasis will be centered on the application of these principles to specific classroom situations.

BERNARD J. GUARINI — Tuesday: 7:00–9:45 P.M.
3 Semester hours — Beginning: February 8, 1972

S8-860 **Astronomy in the Space Age**

Through lectures, discussions, and demonstrations the students become familiar with the solar system, planetary and stellar motions, the physical characteristics of stars, the galaxies, our calendar, astronomical time and calculations, cosmogony, and space travel speculations.

HAROLD L. CHAPMAN — Tuesday: 7:00–9:45 P.M.
3 Semester hours — Beginning: February 8, 1972

S8-876 **Introduction to Philosophical Foundations of Education, Sec. B**

Students in this course will make an intensive examination and critical evaluation of the major philosophies in Western culture which have given direction and meaning to educational theory

and practice in the historical periods, including the Modern Era, in which they exerted major influences. The course is the equivalency to undergraduate credits in both Philosophy and Philosophy of Education.

FELIX MASTERSON — Tuesday: 7:00–9:45 P.M.
3 Semester hours — Beginning: February 8, 1972

S8-153 Learning Resources for Children

Establishes criteria for evaluating and selecting print and non-print materials for the elementary school library. The course explores the use and limitations of standard selection aids and review media. The special problems associated with censorship, materials requiring audio-visual projection, acquisitions procedures, and weeding are discussed.

ELIA L. BROWN — Tuesday: 7:00–9:45 P.M.
3 Semester hours — Beginning: February 8, 1972

S8-578 Linear Algebra

This course will introduce the student to the basic facts of linear algebra. Topics to be considered include: vector spaces, determinants, linear transformations and matrices, and sets of linear transformations and matrices. Other topics will be considered if time permits. The course will be self-contained, and geared to the background of the students involved.

MARSHALL J. KOTZEN — Tuesday: 7:00–9:45 P.M.
3 Semester hours — Beginning: February 8, 1972

S8-185 Science Fiction

With emphasis on historical sources; myth, chinese dragon, Daedalus and Icarus; the colossus of Rhodes; Mesopotamian myth, Head of Roger Bacon; the Frankenstein Story; Lucian's description of flights to the moon; Cicero's "vision of Scipio Spricanus", Aristophanes The Birds and The Clouds; Ariosto's Orlando Furioso; Swift's Gulliver's Travels, Jules Verne, H. G. Wells; Merritt; McDonald; Lovecraft, and others.

NORA BARRAFORD — Tuesday: 7:00–9:45 P.M.
3 Semester hours — Beginning: February 8, 1972

S8-280 Seminar in Educational Service Agencies

The purpose of this course is to acquaint the teacher with the services, agencies, and personnel of the community who are of value to the teacher. Such agencies as the guidance programs, school health programs, Child Adjustment counselors, school psychologists, and special education teachers will be introduced. Model cities coordinators and people from the business community and government services will participate.

Pre-requisite: Teaching experience at the elementary or secondary levels.

KATHLEEN BURNS — Tuesday: 7:00–9:45 P.M.
3 Semester hours — Beginning: February 8, 1972

S8-440 **Urban Geography**

This course deals with the origin, growth and development of cities and urbanized areas. The geographic factors influencing the location of cities and the central place theories are analyzed. The formal pattern of cities, the changing function of cities, urban problems and urban planning are also studied in this course.

RICHARD G. HUNT — Tuesday: 7:00–9:45 P.M.
3 Semester hours — Beginning: February 8, 1972

S9-778 **Advanced Philosophy of Education, Sec. B**

This course has the two-fold purpose of (1) studying and evaluating the contributions made by outstanding philosopher-educators both of the past but especially of the modern eras, and (2) analyzing the basic philosophical issues and problems in education and society and the alternatives posed by the different philosophical systems and assumptions. The student is expected to read and analyze the original contributions of the major educational philosophers in order to determine to what extent a synthesis of viewpoint may be achieved.

Prerequisites: Undergraduate credits in both Philosophy and in Philosophy of Education or equivalency.

TO BE ANNOUNCED — Wednesday: 7:00–9:45 P.M.
3 Semester hours — Beginning: February 9, 1972

S8-466 **Approaches to Economic Concepts and Problems**

This course explores specific modes of relating economic concepts to contemporary economic problems. Specific attention is given to games and simulation techniques appropriate to economic problem solving in the classroom.

Prerequisite: A course in introductory economics or permission of instructor.

GEORGE T. KELLEY — Wednesday: 7:00–9:45 P.M.
3 Semester hours — Beginning: February 9, 1972

S8-837 **Diplomatic History of Modern Europe**

This course examines the cases of World Wars I and II and attempts a synthesis of the international relations of the great powers as revealed in the political impasse of our times. Contributing topics include: nationalism, industrialism, militarism and nalalism, and alliance system, collective security, totalitarianism, economic depressions and technology.

EDWIN HEDMAN — Wednesday: 7:00–9:45 P.M.
3 Semester hours — Beginning: February 9, 1972

S8-74 **Driver and Traffic Safety Education**

A course to prepare teachers in the classroom phase of driver education programs for secondary and commercial schools in Massachusetts.

ANTHONY J. CAPOZZA — Wednesday: 7:00–9:45 P.M.
3 Semester hours — Beginning: February 9, 1972

S8-777 Issues in Elementary Education

Critical issues and problems involving elementary school teachers and principals will be analyzed. Topics will include: ungradedness, team teaching, differentiated staffing, performance contracting, teacher accountability, and educational technology.

RICHARD H. SINE — Wednesday: 7:00–9:45 P.M.
3 Semester hours — Beginning: February 9, 1972

S9-62 Organization and Administration of Guidance

This course will acquaint guidance counselors and supervisors in the elementary and secondary schools with the latest procedures, techniques and problems in guidance programs. Analysis and discussion of unusual home-room, community group, and individual guidance problem will be stressed. Clinical guidance procedures, testing and the principles and methods of interviewing will be presented.

LEONARD F. FARREY — Wednesday: 7:00–9:45 P.M.
3 Semester hours — Beginning: February 9, 1972

S8-266 Use of Multi-Media in Art

A basic studio course designed to give the student several two-dimensional experiences in drawing, painting and design using a variety of media.

DORIS CARTER — Wednesday: 7:00–9:45 P.M.
3 Semester hours — Beginning: February 9, 1972

S9-96 Educational Data Processing

The course is designed to offer practical assistance to the educators interested in the application of data processing to education. Particular emphasis is placed on the administrative uses of the computer. Workshop discussion will concentrate on form design, flow charting and computer programing using the COBOL language. Field trips will be taken to local educational data processing installations. Enrollment will be limited.

JOHN DOWLING — Thursday: 7:00–9:45 P.M.
3 Semester hours — Beginning: February 10, 1972

S8-751 Introduction to Psychological Foundations of Education, Sec. B

This course covers the theoretical aspects of psychology for the classroom teacher. It includes a systematic analysis of the major schools of psychology and a study of the effects of heredity and enviroment. Reading in the following areas will be required: results of research on growth and development, theories of intelligence, concepts in measurement and evaluation, individual differences in capacity and achievement, and learning theory.

RICHARD O'CONNOR — Thursday: 7:00–9:45 P.M.
3 Semester hours — Beginning: February 10, 1972

S8-62 Principles and Practices in Guidance, Sec. B

This is an introductory course designed to provide the student with an understanding of the need, meaning, and scope of guid-

ance services. The principles and practices involved in the following guidance areas will be considered: introduction and philosophy of guidance; understanding the individual and his needs; essential orientation activities for the student; collecting, recording, and evaluating data; interviewing and counseling; evaluation of guidance. The emphasis of the course will be placed upon the role of the classroom teacher in the guidance program.

JOSEPH P. SCANNELL — Thursday: 7:00–9:45 P.M.
3 Semester hours — Beginning: February 10, 1972

S9-52 **Research in Education, Sec. B**

This course will stress the use of appropriate research methods in the selection and evaluation of data. It is designed to aid the graduate student in the preparation and understanding of research reports. Major areas of emphasis will include the nature of and criteria for evaluating research, library techniques and resources, selection and documentation, organization and format of report, and necessary statistical concepts and methods of research. The student will be expected to demonstrate his knowledge of these in term research study.

DAVID W. HILTON — Thursday: 7:00–9:45 P.M.
3 Semester hours — Beginning: February 10, 1972

S9-83 **School Superintendency**

An introductory course in school administration for those professionals whose career goals are ultimately to aspire to central office assignments including the position of Superintendent of Schools. This survey course will study the typical problems associated with the school superintendency including school business affairs, contract negotiations, staff personnel management, school-community relationships, legal aspects of school administration, school plant utilization, school committee policies and regulations, school bus transportation and long range planning for school systems.

Prerequisite: At least two graduate courses in school administration on consent of instructor.

JOHN F. MALONEY — Thursday: 7:00–9:45 P.M.
3 Semester hours — Beginning: February 10, 1972

S8-606 **Stylistics French**

This course offers a review of basic French grammar, stressing idiomatic usage. Presentation of more stylistic forms to enable the student to write more accurately. Translation of published articles and selected readings. Four or five class quizzes and a final examination.

Prerequisite: 2 years of college French or its equivalent.

YVONNE GALLANT-MARTELL — Thursday: 7:00–9:45 P.M.
3 Semester hours — Beginning: February 10, 1972

S9-71 **Techniques and Production of Instructional Materials**

This course is designed to enrich the teacher's classroom performance by developing techniques of visual presentation of subject materials. Pictorial presentations of instructional materials through non-artistic skills will be developed. The techniques apply at all levels of instruction, but the subject matter will be related to the specific interest of each teacher. Students will be expected to provide some of the materials consumed in producing the instructional materials.

PAUL DAVIS — Thursday: 7:00–9:45 P.M.
3 Semester hours — Beginning: February 10, 1972

FOR FURTHER INFORMATION CONCERNING YOUR PROGRAM OF STUDY, PLEASE CONTACT:

MR. JOHN F. EAGER, Director

OR

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